

### Remarks

In view of the above amendment and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested. Claims 1 – 6 remain in this application.

#### **1. Drawings**

A copy of sheet 2 of the formal drawings, previously filed in this application, is submitted with this Response. This sheet includes proposed revisions marked in red for the Examiner's review and approval. In paragraph 1 of the outstanding office action the Examiner pointed out that in Figure 2, reference numeral "18" should be changed to reference numeral "19." The proposed revision is made in accordance with the Examiner's comments.

#### **2. Specification**

The Examiner has indicated that a sentence in the first paragraph of the Detailed Description of the Preferred Embodiment (page 3, lines 22 – 23) is unclear. The Applicant provides an appropriate correction in the above amendment.

#### **3. § 102 Rejections**

The Examiner has rejected claims 1 – 2 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,365,028 to Takano.

Claim 1 is directed to a slide switch for a circuit on a circuit board. The slide switch includes a housing connected to the circuit board. A glider slidably fits inside the housing with a portion of the glider extending outside the housing. At least one contact spring is connected to the glider. The at least one contact spring is oriented in a direction substantially parallel to a direction of travel of the glider in the housing. The at least one contact spring has a projection extending away from the glider. The circuit board includes a plurality of contacts on one side thereof. The plurality of contacts is arranged in at least one row extending substantially in the orientation direction of the at least one contact spring. The plurality of contacts is spaced apart such that the projection of the at least one contact spring forms a detent fit in a space between each pair of adjacent contacts in the at least one row. A portion of the at least one contact spring makes electrical contact with the pair of adjacent

contacts when the projection forms the detent fit to thereby form an electrical connection between the pair of adjacent contacts in the at least one row.

Takano is directed to a slide switch having a movable conductor which serves as a movable contact. The contact is movable relative to fixed parallel bus-bar conductors. The slide switch includes a slide body 12 which fits into housing 10. A movable contact 16 is disposed inside slide body 12. The slide switch also includes a bottom plate 10d. Bottom plate 10d includes recesses 20 b' which accommodate the contact portions of bus-bar conductor strips 22. Thus, when bottom plate 10d is secured to housing 10, the contact portions of conductor strips 22 are pressed against movable contact 16. Conductor strips 22 also extend outside of housing 10 to provide electrical contact with an external circuit (Col. 4, lines 46 – 50, col. 5, lines 59 – 60).

According to **MPEP 2131**, “to anticipate a claim, the reference must teach every element of the claim.” A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Examiner has failed to make a prima facie case of anticipation because the Examiner has failed to point where the prior art reference expressly or inherently describes each and every element as set forth in the claims. The Examiner misidentifies bottom plate 10d by referring to it as a printed circuit board (See col. 4, lines 20 – 21). Thus, the Examiner has failed to shown where Takano describes a slide switch for a circuit disposed on a circuit board as recited in claim 1. The Examiner has also failed to shown where Takano describes a housing connected to a circuit board, as recited in claim 1. Further, the Examiner has failed to point out where Takano describes a circuit board that includes a plurality of contacts on one side of a circuit board, as recited in claim 1. Finally, the Examiner has failed to show where Takano describes a circuit board having a plurality of contacts that are arranged in at least one row extending substantially in the orientation direction of the at least one contact spring, as recited in claim 1. As further evidence of these points, the Applicants note that Takano explicitly describes a discrete slide switch that is designed to be coupled to external electrical circuits (Col. 4, lines 46 – 50, col. 5, lines 59 – 60). It is not designed to be connected to a printed circuit board.

For at least the aforementioned reasons, the Applicants respectfully assert that claim 1 is patentable under 35 U.S.C. § 102(b). Claim 2 is also patentable because it depends from claim 1.

#### 4. § 103 Rejections

The Examiner has rejected claims 3 – 6 under 35 U.S.C. § 103 as being unpatentable for obviousness over Takano in view of U.S. Patent No. 5,293,103 to Hanna.

Hanna is directed to a linear actuator switch configured to adjust the setting of a fan speed control. The slide switch described by Hanna is mounted on a cradle which is disposed on a support plate. The support plate, in turn, is attached to a wall mounted electrical wallbox. The capacitors used to provide selectable impedance between the power carrying leads are directly mounted to the side of the slide-switch. The resistors used to bleed charge from the capacitors are directly connected to the capacitors (See Figure 6, col. 7, line 28 – col. 8, line 9). Thus, Hanna does not show these elements being mounted on a printed circuit board. The switch described by Hanna is coupled to an external fan motor armature winding by way of power lead 37. The switch receives input power from power carrying lead 35 (Figure 6, col. 7, lines 49 – 52).

According to the **MPEP 2143**, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

##### A. The prior art references do not teach or suggest all the claim limitations.

The Hanna reference does not supply the claim elements missing from Takano. The Examiner has failed to show where either reference discloses, teaches, or suggests a slide switch for a circuit disposed on a circuit board as recited in claim 1. The Examiner has failed to show where either reference discloses, teaches, or suggests a describes a housing connected to a circuit board, as recited in claim 1. Further, the Examiner has failed to point out where either Takano or Hanna describe a circuit board that includes a plurality of contacts on one side of a circuit board, as recited in claim 1. Finally, the Examiner has failed to show where the cited references describe a circuit board wherein the plurality of contacts are arranged in

at least one row extending substantially in the orientation direction of the at least one contact spring, as recited in claim 1. Hanna, like Takano, includes leads that are coupled to an external circuit. Neither reference describes a switch disposed in a housing that is mounted on a printed circuit board. Further, the Examiner has failed to point out where Hanna teaches the all of the limitations of claims 5 or 6.

B. There is no suggestion or motivation to combine reference teachings.

There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The Examiner makes several conclusory statements saying that "it would be obvious to" combine some feature of Hanna with the switch described by Takano. The Applicant respectfully asserts that the Examiner is not using the proper legal standard. Thus, the Examiner's reasons for combining the references are not in accordance with established legal precedents.

First, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992). The Examiner did not, and is unable, to point to any place in Hanna where it suggests or provides a motive to modify the Takano structures to obtain the switch in the manner claimed by the Applicant. Instead, totally extraneous to the reference and contrary to the PTO's own rules, the Examiner suggests, without citing support in either reference, that it would be obvious to use, for example, capacitors in Takano's switch. To further drive home the point, the U.S. Court of Appeals for the Federal Circuit has stated that the Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness and in the case of combined references, the Examiner can satisfy this burden "only by showing some objective teaching in the prior art . . . would lead that individual to combine the relevant teachings of the references." In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Moreover, both the suggestion and the reasonable expectation of success must be found in the prior art, not in the applicant's disclosure. In re Vaeck, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). The Examiner has failed to point to any objective teaching in the references for any of the stated reasons for combining the references.

Furthermore, the U.S. Court of Appeals for the Federal Circuit has emphasized that an Examiner "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." Fine, 5 U.S.P.Q.2d at 1600. In the

instant case, the Examiner, now with the claims in mind, has selected and joined isolated parts of the references to assert Applicant's invention would have been obvious. For example, despite the fact that the RC circuit of the present invention is configured to reduce "hum," and is completely different from the RC circuit depicted in Hanna, the Examiner asserts that one of ordinary skill in the art would be motivated to use the RC circuit disclosed by Hanna in Takano's device to thereby obtain the applicants' invention. First of all, because the two RC circuits are different, the combination does not result in the claimed invention. Clearly, the Examiner is using impermissible hindsight to assert that the present invention is obvious in light of the combined references by selecting and joining isolated parts of the references to assert Applicant's invention would have been obvious.

C. The combination of references has no reasonable expectation of success.

As noted above, the proposed combination of references must have a reasonable expectation of success. The Examiner has failed to show how Takano could reasonably accommodate the proposed modifications. For example, the Examiner has failed to show whether Takano would be suitable for its intended purpose if the capacitive circuit of Hanna were included therein. There is no way to determine whether the electrical properties of Takano would be suitable without extensive analysis and re-design.

For at least the aforementioned reasons, the Applicants respectfully assert that claims 3 – 6 are patentable under 35 U.S.C. § 103(a).

## **5. Conclusion**

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests reconsideration of the pending claims 1 – 6 and a prompt Notice of Allowance thereon.

Applicant believes that no extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Response timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect

to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 50-0289.

Please direct any questions or comments to Daniel P. Malley at (607) 256-7307.

Respectfully submitted,

Date: 3/17/03

WALL MARJMA & BILINSKI

A handwritten signature in black ink, appearing to read "Daniel P. Malley", is written over the printed name and registration number.

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification:**

Please amend the first paragraph of the Detailed Description of the Preferred Embodiments, page 3, lines 17 – 25, as follows:

Referring to Figs. 1-2, a slide switch housing 13 is preferably connected to a circuit board 15 by two latches 14 at one end of housing 13 and a single centered latch 16 at the other end of housing 13. During assembly, latches 14 are inserted while housing 13 is canted with respect to circuit board 15, after which housing 13 is rotated downwards toward circuit board 15 and latched into place with latch 16. Housing 13 is preferably one-piece and made of plastic. Housing 13 [is a back]includes an end wall 17 and [with] an opening [end] 18. Opening 18 [to] permits the insertion of [a] glider 20 into housing 13. A cross-piece 19 acts as an end stop for glider 20 and adds strength to housing 13 across open end 18. Glider 20 slidably fits inside housing 13 and is moveable back and forth therein.



FIG. 2

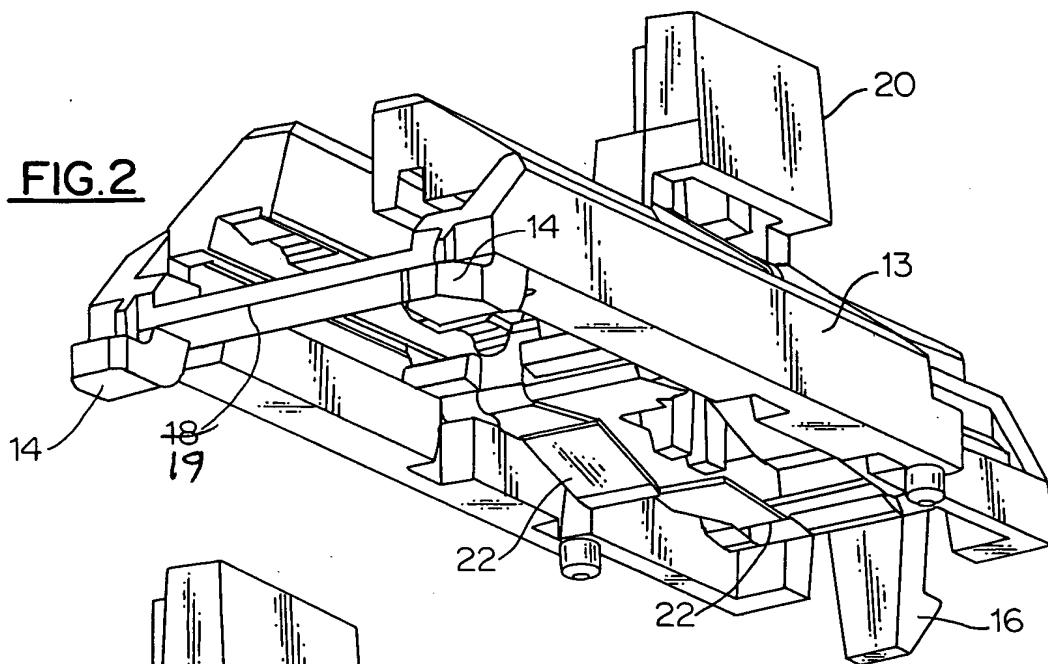


FIG. 3

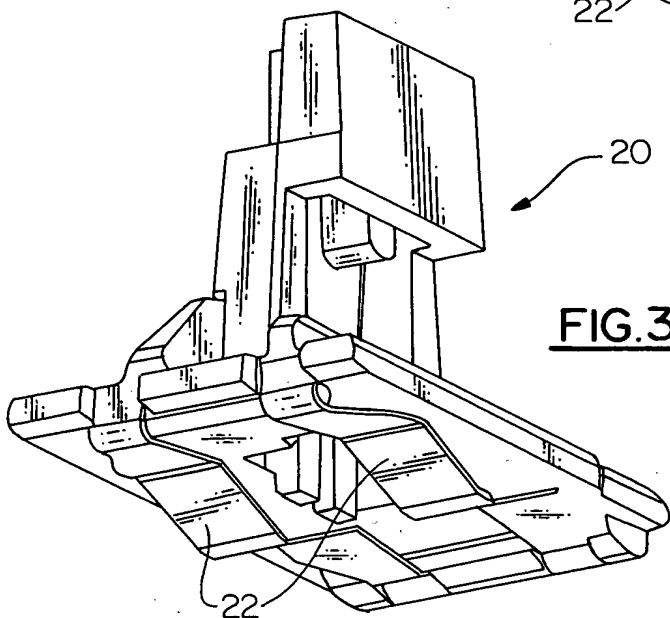
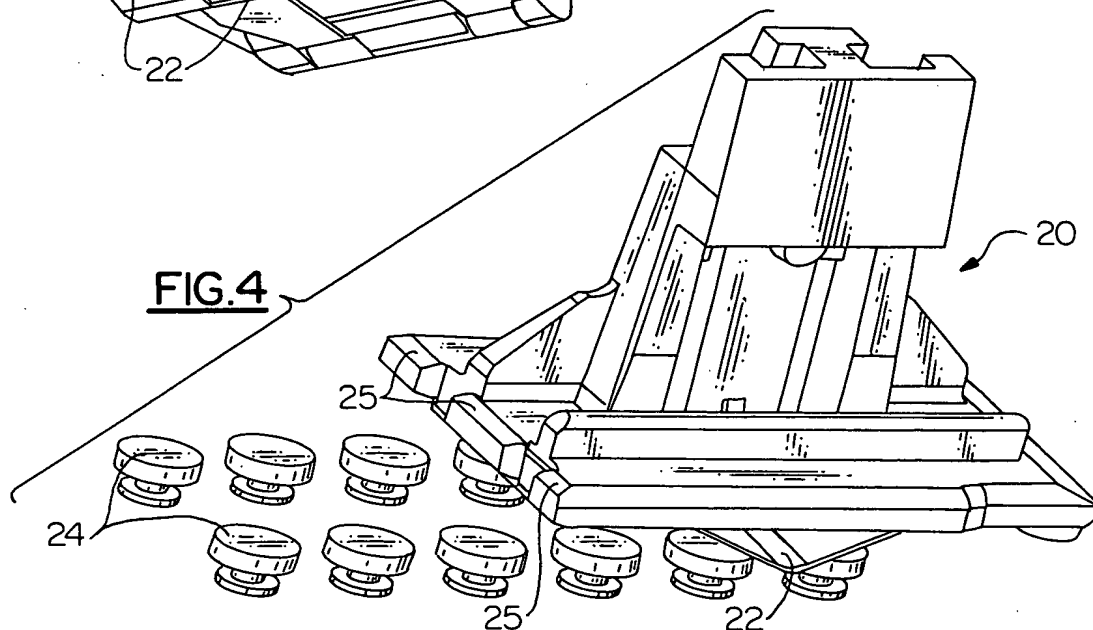


FIG. 4



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